DEPARTMENT OF TOXIC SUBSTANCES CONTROL September 25, 2007

Status: Developing a Health-Based Methamphetamine Cleanup Standard

Legislative Background

<u>Senate Bill 536</u> (Bowen, ch. 587, stats. 2005) directs the Department of Toxic Substances Control (DTSC) to:

- 1. Develop sampling and analytical procedures for methamphetamine residue
- 2. By October 1, 2007, develop a health-based target remediation standard for methamphetamine with guidance from Office of Environmental Health Hazard Assessment (OEHHA)
- 3. By October 1, 2008, develop health-based target remediation standards for iodine, methyl iodide, and phosphine, to the extent funding is available
- 4. By October 1, 2009, adopt investigation and cleanup procedures for use in remediating methamphetamine lab contaminated sites

<u>Assembly Bill 1078</u> (Keene, ch. 570, stats. 2005) established a methamphetamine cleanup standard of 0.1 micrograms per 100 square centimeters, which would be replaced by a health-based target remediation standard when adopted by DTSC.

<u>Goal</u>

DTSC and OEHHA's goal has been to develop a health-base cleanup standard for methamphetamine on indoor surfaces standard prior to October 1, 2007. The methamphetamine cleanup standard currently in statute (Section 25400.16(a), Health and Safety Code) is 0.1 ug/100 square centimeters.

Methamphetamine Health-Based Cleanup Standard Development

DTSC with OEHHA have developed a draft health-based cleanup standard that is different than the standard specified in statute; however, before applying or using any revised methamphetamine cleanup standard, DTSC and OEHHA's draft health-based cleanup standard must undergo a rigorous internal (OEHHA) scientific peer review to validate all aspects of the cleanup standard's scientific basis.

In addition, before the methamphetamine health-based cleanup standard is finalized, it must also undergo: (1) rigorous external scientific peer review by the University of California academia and (2) formal public workshop and comment period.

When DTSC and OEHHA's draft health-based cleanup standard and supporting documents are available for the external University of California scientific peer review, they will be posted for public access and review.

Web Posting and Public Workshops

DTSC anticipates that Public Workshops will occur in January 2008 and that the documents describing the scientific basis for the health-based cleanup standard will be posted in October/November 2007. As comments from the external University of California scientific peer reviews are received, they will also be posted for public access and review.

Approximately 30 days before the Public Workshop is held, a notice will be mailed and posted at http://www.dtsc.ca.gov/SiteCleanup/ERP/Clan_Labs.cfm.

Scientific Basis

OEHHA completed two documents: (1) the methamphetamine reference dose (RfD) document; and (2) the exposure assessment document from which the health-based cleanup standard is derived.

The methamphetamine RfD document describes the rationale and scientific studies considered and used to develop and estimate the lowest dose, which may cause health effects in children.

The methamphetamine RfD was used in conjunction with a state-of-the-art U.S. EPA exposure assessment model to develop a methamphetamine cleanup standard. The Exposure Assessment document compares the two U.S. EPA exposure models, and describes the parameters and assumptions used in each model. The exposure assessment models differ substantially in their complexity, and the more complex model allows for consideration of additional parameters that are specific to indoor settings. Both exposure model results are compared and discussed in the Exposure Assessment document.

Both exposure assessment models incorporate data generated by the University of California, San Francisco regarding methamphetamine dermal absorption. Dermal absorption was determined to be the major route of exposure for toddlers, the population considered when the health-based cleanup standard was developed.

Additional Information

For electronic notifications of methamphetamine cleanup activities, sign up on our listserv or visit our website at http://www.dtsc.ca.gov/SiteCleanup/ERP/Clan_Labs.cfm.